Flavored Tobacco Products

Fact Sheet

Overview: *In the United States (U.S.), consumption of flavored tobacco products such as cigars, cigarillos, smokeless tobacco, shisha or hookah tobacco, and liquid nicotine solutions (used in electronic smoking devices) have increased in recent years [1]. These products come in a variety of flavors including chocolate, berry, cherry, apple, wintergreen, and peach [2] and are sold in colorful packaging, which make them especially appealing to young people. There is growing concern that flavored tobacco products help users develop habits that can lead to long-term nicotine addiction [3].*

Types of Flavored Products

Cigars:

- There are three types of cigars sold in the U.S.: little cigars, which are the same size and shape as cigarettes; cigarillos, which are a slimmer version of large cigars and usually do not have a filter; and large cigars, which are larger and weigh more than little cigars and cigarillos [4].
- Cigars are the second most common form of tobacco used by youth [5]. Many of the brands that are popular among youth come in flavors such as apple, chocolate, grape, and peach [6], while other less traditional flavors are branded with appealing names like "Fruit Squirts," "Waikiki Watermelon," Tutti Frutti," "Blue Water Punch," "Oatmeal Cookie," and "Alien Blood" [7].
- A recent study found that more than 87 percent of adolescents who used cigarillos in the past 30 days used flavored cigarillos [8].
- Regular cigar smoking is associated with increased risk for lung, larynx, oral cavity, and esophagus cancer [9]. Heavy cigar use and deep inhalation has also been linked to elevated risk of heart disease and chronic obstructive pulmonary disease [10].
- Cigars contain higher levels of nitrosamines—which are compounds that cause cancer—more tar, and higher concentrations of toxins than cigarettes [11].

Smokeless Tobacco:

- Smokeless tobacco products include chewing tobacco, dip, snuff, and snus and come in flavors such as mint, wintergreen, berry, cherry, and apple [12].
- These products contain at least 28 carcinogens [13] and have been shown to cause gum disease and cancers of the mouth, lip, tongue, cheek, throat, stomach, pancreas, kidney, and bladder [14].
- Smokeless tobacco products increase the risk of developing oral cancer by 80 percent, and esophageal and pancreatic cancer by 60 percent [15].

Shisha or Hookah Tobacco

- Shisha is also known as hookah, water pipe, narghile, or goza tobacco and is available in an array of fruit, alcoholic beverage, and herbal flavors [12].
- Hookah smoking has been associated with lung cancer, respiratory illness, and periodontal disease [9].
- Many young adults falsely believe that hookah smoking is safer than cigarette smoking [16]. However, smoking hookah for 45 to 60 minutes can be equivalent to smoking 100 or more cigarettes [17].
- One hookah session delivers approximately 125 times the smoke, 25 times the tar, 2.5 times the nicotine and 10 times the carbon monoxide as a single cigarette [18].
- A 2014 study found that teens who use hookah are two-to-three times more likely to start smoking cigarettes or to become current smokers than teens who have not tried hookah [19].

Liquid Nicotine Solution:

- Liquid nicotine solution, also called "e-juice" or "e-liquid," is used in electronic smoking devices such as e-cigarettes.
- There are more than 7,000 e-liquid flavors [20] including cotton candy, gummy bear, and chocolate mint, as well as flavors named after brand name candy and cereal products such as Wrigley's Big Red Gum and Quaker Oats' Cap'n Crunch [21].
- E-liquid, when heated, form an aerosol that emits toxic chemicals known to cause cancer, birth defects, and other reproductive harm [22].
- E-liquids solutions contain varying concentrations of nicotine, ranging from no nicotine to 100 mg per milliliter (a milliliter is approximately a fifth of a teaspoon). The lethal dose of nicotine is estimated to be 60 mg or less for an adult and 10 mg for a child. The toxicity of a 60 mg dose of liquid nicotine is similar to or even higher than that of cyanide [23].

More Young People are Using Flavored Tobacco Products

- Recent declines in the prevalence of cigarette smoking among youth have coincided with an increased use of e-cigarettes and hookah tobacco [24]. In the U.S., cigarettes are prohibited from containing flavors other than menthol; however, other tobacco products such as e-cigarettes and hookah tobacco are exempt from this regulation.
- A 2015 study of adolescents ages 12 to 17 found that among those who self-reported ever *experimenting* with tobacco, the majority started with a flavored product. It also found that most current youth tobacco users reported use of flavored products [25].
- Teen's report that their tobacco use typically started with a flavored tobacco product. One study reported that almost 90 percent of ever hookah users, 81 percent of ever e-cigarette

users, 65 percent of ever users of any cigar type, and 50 percent of ever cigarette smokers said the first tobacco product they used was flavored [25].

- A study conducted by the Centers for Disease Control and Prevention (CDC) found that more than two out of every five middle and high school students who smoke reported either using flavored little cigars or flavored cigarettes [26].
- A 2014 CDC survey of U.S. youth found that 70 percent of U.S. middle and high school tobacco users have used at least one flavored tobacco product in the past 30 days [1].
- This survey also found that 18 percent of all high school students in the U.S. reported using at least one flavored tobacco product in the last 30 days [1]. Among current middle and high school tobacco users, more than 63 percent had used a flavored e-cigarette, more than 60 percent had used flavored hookah tobacco, and more than 63 percent had used a flavored cigar in the past 30 days [1].
- Findings from the 2015 nationwide Monitoring the Future study found that about 40 percent of all students in 8th, 10th, and 12th grades who used vaporizers, such as e-cigarettes, said that they used them because the flavors tasted good, compared to the 10 percent that used them in an attempt to quit smoking combustible cigarettes [27].

Flavored Tobacco Products are Heavily Marketed to Young People [28] with Sweet Flavors and Colorful Packaging

- Flavored tobacco products are very enticing to children and even share the same names, packaging, and logos as popular candy brands like Jolly Rancher, Kool-Aid, and Life Savers [29] and gaming systems like Wii and Gameboy.
- Many of the flavoring chemicals used to flavor “cherry,” “grape,” “apple,” “peach,” and “berry” tobacco products are the same ones used to flavor Jolly Rancher candies, Life Savers, Zotz candy, and Kool-Aid drink mix [29].
- Tobacco companies market their products to young people through the use of youthful models, celebrities, sex appeal, and peer oriented slogans [30].
- Young people are much more likely to use candy-and fruit-flavored tobacco products than adults [31].
- Bright packaging and product placement at the register, near candy, and often at children’s eye-level, make tobacco flavored products very visible to kids [32].

Flavors Make it More Enticing to Smoke Tobacco and More Difficult to Quit

- Flavorings help mask the naturally harsh taste of tobacco, making flavored tobacco products more appealing to youth and easier for youth to initiate and sustain tobacco use [31].
- Studies show that individuals who begin smoking at a younger age are more likely to develop a more severe addiction to nicotine than those who start later [6].
- Both the U.S. Food and Drug Administration (FDA) and the Surgeon General have warned that flavored tobacco products help new users establish habits that can lead to long-term addiction [3], [6].
- Not only do flavors make it easier for new users to begin smoking, but the presence of flavors like menthol in tobacco products also make it more difficult for tobacco users to quit [33].

Flavored Tobacco Products are Cheaper and Sold in Smaller Packages than Cigarettes

- The tobacco industry has promoted little cigars, which are comparable to cigarettes with regard to shape, size, and packaging, as a lower cost alternative to cigarettes [34].
- While cigarettes must be sold in packs of 20, other tobacco products, like little cigars, can be purchased in quantities of one or two at a time, often for less than a dollar [32].
- Price discounting has become the tobacco industry's leading method of attracting users and accounts for the largest percentage of industry's marketing expenditures [35].
- Price discounts disproportionately affect vulnerable populations including young people, racial/ethnic minorities, and persons with low incomes, as these groups are more likely to purchase tobacco products through a discount [36], [6].

Many Young Adults Falsely Believe that Flavored Tobacco Products are Safer than Non-Flavored Tobacco Products

- A recent study found that people younger than 25 years of age were more likely to say that hookahs and e-cigarettes were safer than cigarettes [37].
- Many studies indicate that cigar smokers misperceive cigars as being less addictive, more "natural," and less harmful than cigarettes [38]. The misperception among young people that other tobacco products are less harmful than cigarettes, as well as the fact that these products are less harsh to smoke and taste good, may contribute to the increase in the use of other tobacco products by youth.
- A 2015 study found that only 19 percent of 8th graders believe that there is a great risk of people harming themselves with regular e-cigarette use, compared to 63 percent of 8th graders who think that there is a great risk of people harming themselves by smoking one or more packs of cigarettes a day [27].

- Flavored tobacco products are not only just as harmful as combustible or smokeless tobacco products, but they are also just as addictive [3].
- Other tobacco products than cigarettes (OTP's) such as little cigars, cigarillos, and hookah, like all tobacco products, contain the addictive chemical nicotine which makes them very hard to quit [39] and increase the risk of developing serious health problems including lung cancer, heart disease, and emphysema [40].

Flavoring Chemicals in E-Cigarettes Have Been Linked to Severe Respiratory Disease

- Certain chemicals used to flavor liquid nicotine, such as diacetyl, 2,3-pentanedione, and acetoin, are present in many e-liquids at levels which are unsafe for inhalation [41].
- Diacetyl and its chemically similar substitute 2,3-pentanedione, are used in the manufacture of food and e-liquid flavors such as butter, caramel, butterscotch, piña colada, and strawberry [7].
- Diacetyl, when inhaled, is associated with the development of the severe lung condition bronchiolitis obliterans, also known as "popcorn lung," which causes an irreversible loss of pulmonary function and damage to cell lining and airways [42].
- 2,3-pentanedione caused proliferation of fibrosis connective lung tissue and airway fibrosis in an inhalation study performed on rats [43].
- A 2015 study by the Harvard School of Public Health found diacetyl in 75 percent of flavored e-cigarette liquids and refill liquids tested, and at least one of the three flavoring chemicals, diacetyl, 2,3-pentanedione, or acetoin, was detected in 92 percent of the tested e-cigarettes and liquids [7].

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